Author Index—Volume 45

Backoff, R.W., 131

Coates, J.F., 103, 307
Collingridge, D., 169

Edler, D., 255

Franses, P.H., 287

Genus, A., 169
Gifford, J.L., 111
Goonatilake, S., 63
Goulet, D., 47

Halal, W.E., 207

James, P., 169
Jarman, A., 119
Johnson, B.B., 1

Kim, H., 31
Kostoff, R.N., 189
Kouzmin, A., 119

Mahajan, V., 221
Marcovitch, J., 1
Maruyama, M., 93
Miser, H.J., 299
Mokhtarian, P., 275
Muller, E., 221

Niwa, H., 79
Nutt, P.C., 131

Olszewski, P., 275

Ribakova, T., 255

Sharif, N., 151
Shin, T., 31
Shrivastava, P., 237

Yamaguchi, K., 79

Book Index—Volume 45

Gilder, G., *Life After Television: The Coming Transformation of Media and American Life* (William E. Halal), 219

Henderson, H., *Paradigms in Progress: Life Beyond Economics* (Marvin Adelson), 109

Parker, E.B., Hudson, H.E., Dillman, D.A., Strover, S., and Williams, F., *Electronic Byways: State Policies for Rural Development Through Telecommunications* (Oscar Hauptman and Moses Kiggundu), 213

Preer, R.W., *The Emergence of Technopolis* (Ariel Dinar), 313

Theobald, R., *Turning the Century: Personal and Organizational Strategies for Your Changed World* (Harold A. Linstone), 211

Thompson, F.G., *Looking Back on the Future* (Theodore Modis), 217

TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE 45, 316–320 (1994)

Subject Index—Volume 45

Accident effects, escalation of, 237
Adaptability, urban transportation planning process and, 111
Africa, technological assessment and, 47
Age, telecommuting and, 285
Age of Light, 109
Alaska Wednesday Roundtable, 212
Amateurs, flawed forecasts and, 307
American life, transformation of, 219
Antimaterialism, 106
Ark experiment, 218
Armed forces, technological assessment and, 47
Asia, technological assessment and, 47
Australia, disaster management and, 119

Bhopal crisis, lessons from, 237
Bibliometrics, federal research impact evaluation and, 189
Borderless global market, innovation diffusion in, 221
Bottom-up approach
  technological development in Korea and, 31
  transition from hierarchy and, 210
Brazil, technology futures in, 1
Buddhism, 104
Business strategies, in developing countries, 151

California
  Silicon Valley and, 313
  telecommuting frequency and impacts for state employees, 275
Canada, futures movement in, 217
Capability development, integration of business and technology strategies and, 151
Capital intensity, North Sea oil development and, 169
Central planning, transition from hierarchy and, 207
Centralized decision making, North Sea oil development and, 169
Children, telecommuting and, 275
Chrestomathy, of flawed forecasts, 307
Collaborative synergy, leadership encourages, 208
Committment stage, technological development in Korea and, 31
Communications technology, mastery over, 47
Community development, in Japan, 79
Community participation, models for, 212
Compassion, 105, 211
Concentrated expertise, North Sea oil development and, 169
Conflicting perspectives, 212
Conflict resolution, 105
Consensus stage, technological development in Korea and, 31
Contingency-based policy, disaster management and, 119
Contradictions, industrial crises and, 237
Coordination stage, technological development in Korea and, 31
Corporate executives, in management of economic infrastructure, 208
Corruption, 212
Cost-benefit analysis, federal research impact evaluation and, 189
Cost overruns, North Sea oil development and, 169
Customer-support centers, 209

Decentralized market systems, 208
Decision makers, systems analysis and, 299
Demand-pull phenomenon, 93
Democratization of belief, 106
Demographic variables, telecommuting and, 275
Denial, flawed forecasts and, 308
Deregulation, integration of business and technology strategies and, 151
Developing countries
  integrating business and technology strategies in, 151
  technology assessment and, 63
Development delays, North Sea oil development and, 169
Development flower, institutions and methods, 47
Dialogue, effective systems analysis work and, 299
Diffusion
  in borderless global market, 231
  of industrial robots, 255
Disaster management, as contingent meta-policy analysis, 119

Ecofeminism, 110
Ecology, 106
Egocentrism, 212

Electronic byways,rural development through telecommunications and, 213
Employment, industrial robots and, 255
Enterprise level, technological innovation planning and, 1
Entrepreneurship, 209, 313
Environmental attitudes, technology assessment in developing countries and, 63
Epistemological types, heterogeneity and, 94
Ethics
  systems analysis and, 299
  technology assessment in developing countries and, 63
Euro America, technology assessment and, 63
European Community, 1992 unification of, 221
Expert systems, disaster management and, 119
Ex-post research assessment, federal research impact evaluation and, 189
External enterprises, 208
Exxon Valdez crisis, lessons from, 237

Facility size and permanence, urban transportation planning process and, 111
Fanaticism, 212
Federal government, disaster management and, 119
Federal Republic of Germany, industrial robots and, 255
Federal research impact evaluation, quantitative and qualitative, 189
Fiber optic networks, 220
Fishing, off Canadian Atlantic coast, 217
Flat structures, 207
Flexibility
  North Sea oil development and, 169
  urban transportation planning process and, 111
Flexible organizations, 207
Focal points, participatory technology assessment and, 47
Forecasts, flawed, 307
Foresight activities, technological development in Korea and, 31
Free enterprise, inside large organizations, 208
Free markets, future of, 211
Fundamental technologies, Korea and, 31
Futures studies
  flawed forecasts and, 307
  futures orientation and, 104
  looking back on future, 217
  national development and, 1
  transition to future, 211

Gatekeepers, technological, 47
Gender
  technology assessment in developing countries and, 63
  telecommuting and, 275
Global marketplace
  innovation diffusion in, 221
  integration of business and technology strategies and, 151
  transition from hierarchy and, 207
Global policy, advice and planning capabilities, 119
Global thinking, 105
Global village, 106
Gompertz curves, with seasonality, 287
Government policy, community development in Japan and, 79
Greed, 212
Greenhouse effect, 119
G-type epistemological type, heterogeneity and, 95

HAN project, technological development and, 31
Hazardous systems, managing, 237
Health and healing, 106
Heterogeneity, interwoven and interactive, 93
Hierarchy, transition from, 207
History in action, 213
Holism, 105
Human contradictions, industrial crises and, 237

Image leadership, integration of business and technology strategies and, 151
Independent oil companies, North Sea oil development and, 169
Indigenous technology capability, Korea and, 31
Individual perception of risk, industrial crises and, 237
Industrial age, Japan and, 79
Industrial crises, technological and organizational roots of, 237
Information age
  Japanese community development in, 79
  new form of organization evolving for, 207
Infrastructural requirements, North Sea oil development and, 169
Innovation
  borderless global market and, 221
  technology futures and, 1

Institutional arrangements, participatory technology assessment and, 47
Institutional conflict, disaster management and, 119
Integration, of business and technology strategies, 151
Interactive heterogeneity, in 21st century, 93
Interconnection of societies, 106
Internal customers, 207
Internal enterprise units, organization composed of, 208
Internal LBOs, 207
Internal markets, 207
Interwoven heterogeneity, in 21st century, 93
Intrapreneuring, 207
Intuition, 104
Island-state survival, water resource planning and, 119
I-type epistemological type, heterogeneity and, 95

Japan, new-thinking economic paradigm and, 79

Key technologies, Korea and, 31
Knowledge, expressions of, 189
Korea, HAN project and, 31

Lack of imagination, flawed forecasts and, 309
Latin America, technological assessment and, 47
Laws of the macrocosm and microcosm, 219
Lead time, North Sea oil development and, 169
Lean management, 207
Legislative process, future of, 211
Leontief-Duchin-Szyld dynamic input-output model, improved, industrial robot effect on employment and, 255
Life
  after television, 219
  beyond economics, 109
Limited expertise, flawed forecasts and, 309
Local government, disaster management and, 119
Local knowledge systems, technology assessment in developing countries and, 63

Massachusetts Route 128, as technopolis, 313
Mechanical extrapolations of trends, flawed forecasts and, 310
Media, transformation of, 219
Mediation, 105
Meditation, 104
Me-now syndrome, 212
Meta-policy analysis, disaster management as contingent, 119
Metastructures, market, 210
Misplaced expertise, flawed forecasts and, 309
Motherhood recommendation, 214
Multinational oil companies, North Sea oil development and, 169
Mystical experience, 104

National level
  development in Brazil and, 1
  technological development in Korea and, 31
  technological innovation planning and, 1
Neglect of constraints, flawed forecasts and, 310
Negotiation, 105
Networks, 207
New Age concepts, 103
New-thinking economic paradigm, community development in Japan and 79
Niche, integration of business and technology strategies and, 151
Nonprofit organizations, transformation of, 131
North Sea oil, inflexibility in development of, 169

Ohne-mich-ism, 93
Oil fields, inflexibility in development of, 169
Operations level, technological innovation planning and, 1
Optimism, excessive, flawed forecasts and, 310
Organizational contradictions, industrial crises and, 237
Organizational economy, 208
Organizational strategies, transition to future and, 211
Overestimation, flawed forecasts and, 308
Overspecification, flawed forecasts and, 310

Pacific Basin region, water resource planning and, 119
Pantheism, 106
Paradigms in progress, 109
Participatory technology assessment, institutions and methods, 47

Partnership, systems analysis and, 299
Pasadena project, 212
Peace, 105
Peer review, federal research impact evaluation and, 189
Personal computers, telecommuting and, 275
Personal strategies, transition to future and, 211
Population growth, in poorest countries, 217
Post-*perestroika* migration, from east to west, 93
Preconditions, industrial crises and, 237
Prices
  integration of business and technology strategies and, 151
  North Sea oil development and, 169
Private sector enterprises
  integration of business and technology strategies and, 151
  transformation of, 131
Privatization, integration of business and technology strategies and, 151
Problem situations, systems analysis and, 299
Product-oriented technologies, Korea and, 31
Profit centers, 209
Prophecy, 105
Public organizations, transformation of, 131
Public sector enterprises
  developing high-tech centers and, 313
  integration of business and technology strategies and, 151

R & D, technological development in Korea and, 31
Reengineering, 207
Research review, federal research impact evaluation and, 189
Research selection, federal research impact evaluation and, 189
Resistance to change, 212
Risk, industrial crises and, 237
Robots, industrial, 255
Rural development, through telecommunications, 213

Science and technology policies
  Korea and, 31
  national development and, 1
Seasons, Gompertz curves and, 287
Sectoral level, technological innovation planning and, 1
Secular religion, 106
Sensorium, 105
Silicon Valley, as technopolis, 313
Simple transfer of concepts, technology assessment and, 63
Skill requirements, industrial robots and, 255
Social factors, technology assessment in developing countries and, 63
Social organizations, technology assessment in developing countries and, 63
Social Security system, future of, 211
Special task forces, technological development in Korea and, 31
Spiritual awareness, 104
State government, disaster management and, 119
State policies, for rural development through telecommunications, 213
Strategic management, in transformation of public and third sector organizations, 131
Strategy progression path, integration of business and technology strategies and, 151
S-type epistemological type, heterogeneity and, 95
Subordination, of technology to finalities, 47
Success, new measures of, 211
Supraorganizational sense of mission, North Sea oil development and, 169
Systemic contradictions, industrial crises and, 237
Systems analysis, as dialogue, 299

Taxes, future of, 211
Technological contradictions, industrial crises and, 237
Technology assessment
  developing countries and, 63
  participatory, 47
Technology exploiter, integration of business and technology strategies and, 151
Technology extender, integration of business and technology strategies and, 151
Technology follower, integration of business and technology strategies and, 151
Technology futures, national development and, 1
Technology leader, integration of business and technology strategies and, 151
Technology strategies, in developing countries, 151
Technopolis, emergence of, 313
Telecommunications, state policies for rural development through, 213
Telecommuting, by State of California employees, 275

Telecomputers, 219
Telefuture, 219
Television, life after, 219
Tender-minded people, 103
Third sector organizations, transformation of, 131
Third World nations, technological assessment and, 47
Top-down approach, technological development in Korea and, 31
Tough-minded people, 103
Transformation
  of media and American life, 219
  need for, 103
  of public and third sector organizations, 131
Transition, to future, 211
Tripartate-dialogue concept, systems analysis and, 299

Uncertainty, in urban transportation planning process, 111
Underestimation, flawed forecasts and, 308
Unexamined assumptions, flawed forecasts and, 308
Unification, market penetration and, 221
Unit size, North Sea oil development and, 169
Urban transportation, policy and planning, 111

Value, integration of business and technology strategies and, 151
Vicious circles of behavior, industrial crises and, 237
Videocassette recorders, diffusion of, 221
Virtual corporations, 207

Water resource planning, disaster management and, 119
Weapons technology, mastery over, 47
Western nations, technology assessment and, 63